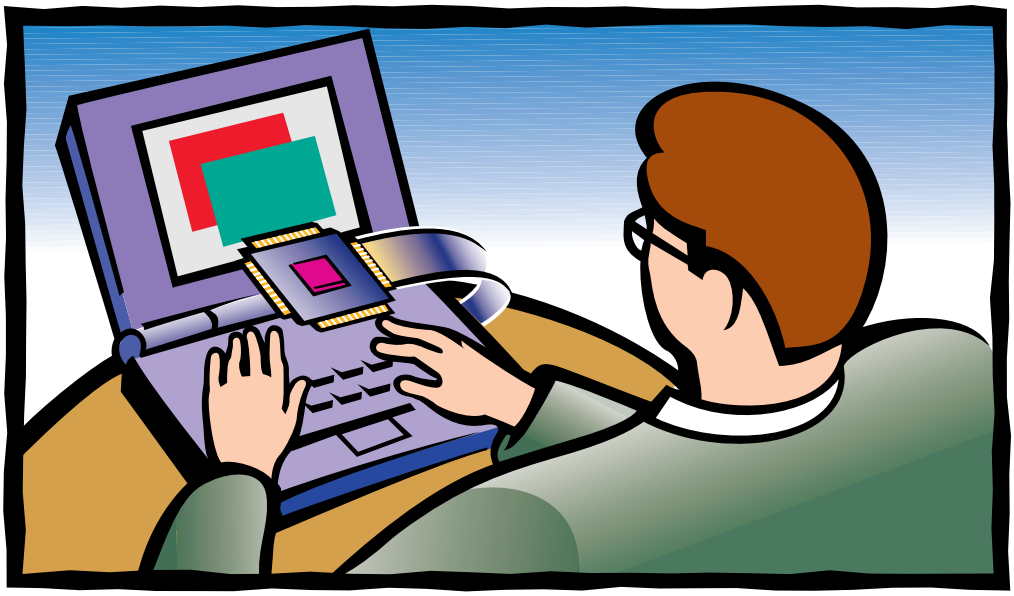
Mobile Pentium® Processor Family

Now available in speeds up to 133MHz.

Today's mobile Pentium® Processor family delivers the highest performance in notebook computers without compromising battery life. At the heart of today's most powerful notebooks is the 133MHz Pentium processor, the latest edition to the Intel processor family for mobile computers. This processor provides enough horsepower to run full-screen, full-motion video, as well as real-time animation and dynamic multimedia presentations.

User Benefits:

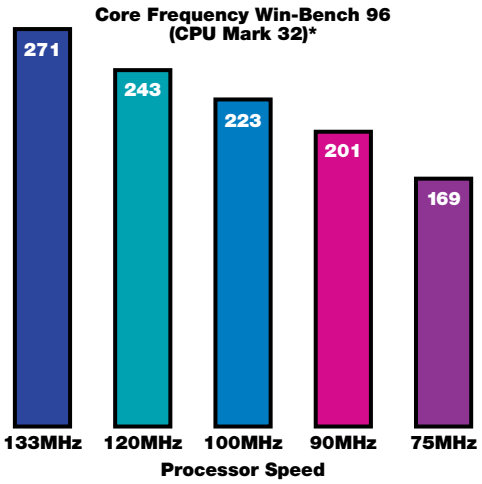
- True Pentium processor performance in a line of processors designed specifically for mobile computers
- Superior power management for extended battery life
- Smaller, lighter and cooler Tape Carrier Package (TCP)
- Voltage Reduction Technology enabling 2.9V internal operation while maintaining 3.3V for the rest of the system



Today's notebook computers are being designed with more desktop features. Advancements such as high-resolution graphics, full-motion video, CD-ROMs, fax modems and other peripherals are making the notebook as functional as desktop PCs. In fact, the new 133MHz mobile Pentium processor paired with a PCI bus provides true desktop equivalence.

Intel's advancements in mobile processors go well beyond chip speed. Mobile Pentium processors help extend battery life. Intel's Voltage Reduction Technology (VRT) allows the processor to communicate with industry standard 3.3-volt components while its inner core operates at 2.9 volts, conserving power. The processor also intelligently reduces the entire system's power usage by entering System Management Mode (SMM) and shutting down notebook peripherals when not in use. Further power reductions can be achieved with Intel's SL Technology which stops an idle CPU's clock, reducing its power consumption to less than a watt of power.

Today's mobile Pentium processors also manage heat very effectively. A special package called Tape Carrier Package (TCP) puts a thin protective film directly on the silicon, making the entire processor less than 1mm thick (about half the thickness of a dime). The result is efficient thermal management.



*Prior publications used the Unix SPECint benchmark, but since most notebook users use Windows and Win95, it has been superseded by Winbench96.

Processor Features

The Pentium processors for mobile computing utilize advanced design techniques such as superscalar architecture, enhanced floating point unit, 64-bit data bus, 8KB data cache, 8KB code on-chip cache, and 66MHz, 60MHz and 50MHz external bus speeds. These design techniques allow the processor to provide maximum performance in notebook computers, speed up today's applications, and pave the way for tomorrow's emerging software.

The mobile Pentium processors—133MHz, 120MHz, 100MHz, 90MHz and 75MHz—with Voltage Reduction Technology are offered in both a 320-lead TCP package and a 296-pin SPGA package. The TCP package was developed to meet the challenge of providing desktop performance in a mobile environment constrained by mechanical and electrical design considerations. It is five percent the size and less than two percent the weight of the equivalent desktop version. TCP's small size and thermal efficiency bring desktop performance to notebook computers while leaving room for additional capabilities and features.

Each Pentium processor for mobile computing consists of 3.3 million transistors. The Pentium processors 133MHz, 120MHz and 100MHz are manufactured on Intel's 0.35mm BiCMOS process technology. Intel's BiCMOS process uses bipolar transistors for increased performance, and CMOS transistors for reduced power consumption with increased density. This BiCMOS process technology enables Intel to integrate the same number of transistors onto a smaller die than was possible on the earlier versions of the Pentium processor. The result is that you can get more performance with relatively little cost in terms of power consumption. For example, the mobile Pentium processor 133MHz (from the .35 process) is more than 30% faster than the Pentium processor 90MHz (from the .60 process) even though they both consume approximately the same power (typically 2.5–3.5 watts.)

Integrated on these processors are the following features: Voltage Reduction Technology, Intel's energy-efficient SL Technology features, and an on-chip cache/floating point unit power-down mechanism. These three features, along with static design, facilitate intelligent power management transparent to the operating system and application software. SL Technology includes Stop Clock, Auto Halt Power Down, Auto Idle Power Down, I/O Restart, and Intel System Management Mode (iSMM).

For more information on Pentium Processors for mobile computers, please access Intel's home page on the World Wide Web at:

http://www.intel.com/

For more specific information on the Mobile Pentium Processors, please refer to the following web site:

http://www.intel.com/procs/mobile

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Printed in U.S.A./0296/80K/GM/CC/ME/LS
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Product Highlights:

- Pentium® processor iCOMP® index rating:
  1110/133MHz
  1000/120MHz
  815/100MHz
  735/90MHz
  610/75MHz
- Voltage Reduction Technology
- Superscalar Architecture
- Enhanced Floating Point Unit
- 64-Bit Data Bus
- 8KB Data and 8KB Code Caches
- 66MHz, 60MHz and 50MHz Bus Speeds

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